American Farmer,

AND SPIRIT OF THE AGRICULTURAL JOURNALS OF THE DAY

"O Fortunatos nimium sua si bona norint
"Agricolas." . . . . *Virg.*

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Necessity of Supplying the Soil with the Constituents of the Crops grown on it.

☞The new light which the improved state of science is throwing on agriculture, must be hailed by all *thinking* farmers with joy. At present this light is restricted in its radiance, but few, comparatively, out of the ranks of the learned, feeling its beneficial influence. But the time seems to be approaching—let us bid it speed—when in the culture of the earth, *science* will guide practice, and good farming—the most profitable farming—become an art which will require the skilful exercise of intelligent MIND, more than the excercise of physical power, to pursue it with the greatest success.

Chemistry—the patron-genius of agriculture—is now lending its aid as it never before lent it, to dispel the darkness which has to long enveloped the farmer in his pursuit, and teaching him to see, and enable him to comprehend, the true processes by which his crops and animals are formed, and the necessary conditions required to make the one heavy and the other fat, at the least expense and with the most profit. The desirable light is being constantly diffused by scientific men, particularly in England and Scotland, in lectures and communications through the press, and thousands seek it as eagerly as they do their own prosperity, and, indeed, their prosperity depends, in an important degree upon it.

To no one, we think, are the farmers on either side of the Atlantic, more deeply indebted for efforts to benefit them by imparting valuable scientific knowledge, than to Prof. Johnston, of Scotland. The following abridged report of one of his late lectures before the *Dumfries Farmers' Club*, on the necessity of returning to the soil the constituents of the crops taken off, I think will interest many of your readers:

"The different substances of which plants are composed, must exist in the soil on which they grow: according to the nature of the plant to be reared, so ought the land to be manured. Thus, while wheat grain contained only two per cent of ashes, hay contained 10 per cent. Hence the wheat required a much larger amount of combustible aliment than hay. It was true that the whole of the combustible matter was not obtained directly from the soil, as a large portion was derived from the air; but from five to ten per cent. of the straw of wheat was obtained from the soil; hence the provision made in leases, that no straw should be carried off the land. Different kinds of hay carry off different quantities of inorganic matter from the soil, and consequently have different effects upon the land.

Every plant grown, requires, in accordance with the nature and composition of the soil, the proportion of the ingredients in its ashes. If no alteration of crop is made, nature will become exhausted in some of her resources, and the plant for want of requisite nourishment from the soil, must die. We have facts to prove that nature will not forever grow the same plant on the same soil. The Black Forest consisted first of oak, then of pine, and now it is again covered with broad-leaved trees; and as with trees, so with crops; and as on a large, so on a small scale.

Different modes of husbandry have been adopted. Instead of oats being grown 15 or 20 years on the same soil, the rotation of three white crops and six years' grass was adopted: this also, has become antiquated, and now the preferable alternation of white and green crop is adopted. Alternating crops, and adding such manures as have been carried off by preceding crops, is the only profitable mode of cultivation, while nature will also assist by the going on of certain circumstances, such as the decomposition of minerals, &c.

A soil containing just sufficient lime for a luxuriant crop of rye-grass, would be far deficient for either clover or lucerne. The soil must contain in abundance what your crop specially requires, and consequently the necessity of selecting the manure to suit the crop wanted.

The ground becomes exhausted in many ways. By cropping too long with either one kind or different kinds of grain and straw, it becomes exhausted of some of its soluble mattter by the action of the rains, just in proportion to the wetness of the soil. By the application of proper manures, the waste may be replaced. Feeding on the ground will replace a portion of the waste of solid matter, by the dung voided by the animals; but a great portion of the *soluble* is lost, both by being, to a small extent, irrecoverable, and because of the direct waste by carelessness or ignorance. These soluble or saline substances, are principally contained in the urine of cattle, and just in proportion as it isl ost, so is the direct waste. Guano is not a more valuable manure than the urine of cattle. By building suitable tanks, the whole of the barn-yard saline might be preserved, and 900 lbs. of good solid matter, equal to the best Peruvian Guano, would be the annual produce of one cow. We have frequently been astonished at the results of certain saline substances when scattered over unhealthy plants, and by the first shower washed into the soil and immediately consumed by the plant as its proper and necessary food; and just in proportion to the ease with which it gets the substances upon which it is supported, and of which it is composed, will it vegetate and flourish.

To resume: Suppose any of the substances of which a plant is composed, to be already in the ground in sufficient proportion, then any addition cannot do good. Suppose soda to be in sufficient quantity for hay, any addition would be unprofitable for a rye-grass crop, while it would be of immense benefit to clover or lucerne. And again, some soils contain it in sufficient quantity for every variety of crop, consequently any addition would be unprofitable. Hence the reason of so many conflicting opinions respecting the utility of various manures. One tries gypsum, in whose soil it is deficient, and finds it an invaluable manure; another applies it to his soil, which is already well supplied with it, and pronounces it worthless.

Milk contains so much bony earth, that in 75 years, a cow pastured on an acre of land, will carry off a ton of bones. Hence, (the Professor said,) some lands used for dairy purposes in Cheshire, had, in the course of years, deteriorated to such a degree that they were not worth more than from 5s. to 10s. per acre. just because the cows pastured on them had carried away all the bone out of the soil. Bone-dust was at length applied as a top dressing, and the results were so astonishing, that the land increased 700 per cent. in value, and the rector's tithes were increased five-fold. Any or all other manures, had the soil wanted bone, would have proved ineffectual. The bones added just what had gradually been taken off in the lapse of years, in consequence of the peculiar husbandry of the district."—*N. Y. Farmer.*

Legislative Agricultural Conversation.

[*From the Boston Cultivator.*]

Sixth Agricultural Meeting at the State House, Feb. 11.

Hon. Levi Lincoln in the chair. Subject, "Fruit and Fruit Trees." Hon. Mr. Foote, of Berkshire, opened the discussion. He dwelt at considerable length on the pleasure and advantages of cultivating fruit, as it contributed largely to gratification, health and sustenance. He said that it afforded a two fold enjoyment, as it was not only pleasant to the taste, but to the eye also. The temptation of Eve must have been great.—No wonder that she did not withstand it. Almost every person admires fruit, yet but few pay particular attention to raising it; and some will not attempt it because it requires some outlay, and a delay for a while before any income is received. But those who will not plant for posterity are narrow minded; for they can be a blessing to those that succeed them. It is a pleasant business. What can be more delightful than fine fruit growing on one's own premises. The trouble and expense of raising fruit is over estimated. It requires skill and judgement. Proper attention to this subject is an evidence of refinement, good taste and good manners.—The daughters of Eve are to be commended who cultivate flowers, and fill their Herbariums with specimen plants. A professor stated that fruit was not only meat and drink, but the Cayuga Red Stripe, a favorite apple, was a catholicon.

Mr. Foote stated that fruit was also excellent for swine; they preferred it to potatoes or corn. It was likewise good for neat cattle, making excellent flesh, and cows fed with a peck of apples a day would give more and better milk. Some say that they are better than potatoes for this purpose. Some persons suppose that the nutritive power of sweet apples is greater than that of sour, but this is not correct. Sour apples should be cooked, and Indian meal mixed with them. As to profit in raising fruit, a few statistics will show a favorable result. In setting trees 40 feet apart, there will be 40 to the acre, which before arriving to maturity would produce 10 bushels each, making 400 bushels to the acre, which at 25 cents per bushel would bring $100. A farmer in this vicinity has received $1500 a year for the produce of six acres.

In raising fruit trees, he recommended having good soil, well manured and thorough cultivation and strict attention. Seeds should be sown in drills 18 to 20 inches apart, and the plants thinned out to 3 or four inches. Let them be well cultivated and the weeds kept out and they will get a good growth, some to the height of 2 feet the first year. Next spring take up the stocks, rejecting all that are poor, cut off the tap root, and set out in rows. Keep out the weeds and in August they will be fit for budding. Great attention should be paid to the varieties propagated, as some form vigorous trees, while others do not, and there is a great difference in the bearing properties and qualities of fruit. Some fruit will not flourish far from its origin. The Esopus Spitzenburgh declines when carried to a distance. The *Ne Plus Ultra*, of Boston, (the Baldwin doubtless,) declines in the north, and it is only a common apple in Berkshire. The Newton Pippin, so famous in New York, declines in Massachusetts. It is better to carry fruit to a warmer than to a colder climate. In setting standard trees, the earth should be rich, but not by recent manuring. Set the trees their common depth, and 25 to 30 feet apart. In a light dry soil trees may be set in the fall, but in a heavy soil better set in the spring.

Mr. Gray, of Boston, said that he had experience in cultivating fruit trees. The trees in his orchard were set 40 feet apart, and as the tops did not spread over the land, he supposed the roots extended no further, of course it was not necessary to plough and manure beyond the extension of the roots. He thought it sufficient to fork in manure around the tree, and the rest of the land devoted to grass. The subject of insects is very important. Caterpillars may be easily destroyed, as they make their appearance in the spring. But the borer is difficult to destroy. He had cut them out and in this way nearly destroyed the tree. He found them less destructive in clayey than in sandy soils. Sand laid around trees is a partial remedy for canker worms. Leaden gutters are expensive, and not effectual, but injurious from the oil getting on the

trees. In some places their ravages have been dreadful.

Dr. Harris, the distinguished entomologist, of Cambridge, recommends turning in young shoats among the trees, and as they are quick scented for animal substance, however small they will discover and destroy them. He recommended putting litter around newly set trees. He set 100 in the spring of 1841 and put moss around them, and though in that summer was one of the most severe droughts ever known, they all did well.

Rev. Mr. Sanger, of Dover, said that a few years ago he had no faith in his soil for raising fruit trees, as it was very light and dry. But he set trees in 1841 and put straw and hay around them and stones on it, and they flourished well in dry season. In the fall he puts compost manure around the roots of the trees which he covers with soil, and spreads it in the spring. His trees grow well. Trees may be made to flourish almost any where, as they live almost wholly on the atmosphere.

Mr. Greenville Stephens, of Rehoboth, said that on strong soil where his trees grew large, they did well when set at a distance; but on light soils, in exposed situations, where the trees never attained a large growth, they did best when tolerably near. Under such circumstances he he had observed that the outer trees were smaller and produced less fruit than those in the middle, which were protected by the outside trees. As to canker worms he observed that in some cases they eat all before them and soon were starved out. Birds destroy these insects, and should be protected against wanton boys who molest and kill them. The borer is a hard case. He had tried lime, ashes, and soap suds, in vain. With a little trouble they may be cut out when first entering the tree, by examining several times in a year.

Capt. George Randall, of New Bedford, remarked he set an orchard in 1837 of 233 trees. He had reduced the heads, and he cut off smoothly and obliquely all roots that were mutilated. He used oil of soap with sand, as thick as could be conveniently spread on the tree. He added only a little water, and it was so thick that a shingle would stand up in it. With this the trees were scrubbed as high as a person could reach, using for this purpose a crash towel. He followed this till 1844, when he read the Prize Essay of Gaylord; he then deferred the operation till the 29th of May, and it was all completed in a few days. No borer had ever been seen in his orchard, excepting in a few dwarf French trees that had been neglected. The soap runs down and is a good manure. In 1841 he offered his orchard, and the first premium of the Mass. Agricultural Society. He planted his trees apart, and he found that it was too near, as they would cover the ground. He collects scions at any season, and sticks them into a potato, and as the potatoes decay, he puts the scions into fresh ones; and thus preserves them well. He does his own grafting, and any man who can make a spile to put into a cider barrel can graft. He heads down large trees cutting all off, a plenty of suckers will come out.

Mr. Randall observed that an editor of an agricultural journal in Boston, had said "spare us from such farmers as Mr. Randall, Mr. Webster, Mr. Cushing and Mr. Wells." But what he did, he did well; and as that editor had stated that such farmers as he had named, made no money by farming, if that gentleman ever came to New Bedford and would call on him, he would show by his books, in which he keeps an accurate account, that his farming was successful, and attended with profit. He felt highly honored in being classed with so respectable company.

Mr. Buckminster, of the Ploughman, said he should not defend what he had said, but in regard to making no money by farming his remarks were applied to Mr. Webster. He said that we were learning on the subject before us. We had found out the habits of the borer, which was important.—The eggs were deposited, ten in number, at, or near the root of the tree, about the first of July. When the young worms are hatched they eat into the tree, the next year they go up the trunk a short distance, and come out the third year. We should prevent their going in; it is of no use to dig them out, and it injures the tree.

Mr. Porter, of Danvers, said that they were not much troubled with borers in that town, but he believed that the canker worms commenced their ravages in Essex county. In 1838 he bought a small farm on which there was an orchard, which was in a bad condition, and which had been nearly destroyed by canker worms. He ploughed amongst the trees, and took up the soil for 4 or 5 feet around the trees and hauled it away, and in this manner he got rid of the canker worms. He puts compost manure around the trees.—The orchard flourished well where he ploughed shallow, but in a small part where he ploughed deep and broke the roots of the trees, they nearly died. A man in his employ trimmed a tree severally and it decayed, rotting where the limbs where cut off.—He cut out only the decayed limbs, and such as interfered, and trees thus treated flourished. At first the crop of apples was only 17 barrels, in three years it was 400 barrels, and has since been from 4 to 700. He had set a row of 60 or 70 trees 16 feet apart, and that flourished well, bearing a good crop every year. He found the cheapest way to cultivate his orchard was to sow oats and cut them for fodder, and then plough and manure, and sow oats again the next season. He had put fresh spent tan around his trees, and it injured them; then he laid it in a pile till it became mouldy, when it was put around the trees, and it had an excellent effect in protecting them from drought, and it delayed their blossoming till the weather was mild, which saved them from blight, which is so often caused by frost and cold winds when trees blossom early. Owing to the moisture retained around the trees the fruit held on well in severe droughts, when a great part of it would fall, without this protection.

Mr. Cole, of the Cultivator, exhibited several excellent varieties of apples from different sections of the country, some of which are new in this region, and are regarded as highly valuable, which fruit was tried by gentlemen at the close of the meeting. He made some remarks as to their peculiar qualities; but as some have lately been described in the Cultivator, and others will be soon, when we give an account of specimens which we have received from Mr. Joseph Pinneo, of Hanover, N. H., and Messrs. Ellwanger & Barry, of Rochester, N. Y., we omit the remarks.

The same subject continued.

[*From the Louisville Journal and Dollar Farmer.*]

We present to-day a communication from our correspondent, Grazier, on the cultivation of Irish potatoes and the failures to which they are liable. It may be said to be a thorough treatise upon the subject, containing as it does all the necessary information, conveyed with the accuracy and detail of a thorough master of his subject. The articles, by the same writer, on sheep husbandry, which we recently published, deserve similar praise. They are the most valuable articles on that subject that have been published in the periodical press for many years.

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ON THE CULTIVATION OF POTATOES, AND THE DISEASES AND FAILURES TO WHICH THEY ARE, AND HAVE BEEN, LIABLE.—So *much* has been written within the last two years on this subject, and so *little* has been said of any practical use, that I am sorry and surprised that some more competent person than myself has not taken up his pen before now to set all *theory* at rest upon the subject.

In giving you the result of many years experience in the culture of potatoes with myself as well as with the most extensive growers of that valuable root in Great Britain and Ireland, and I believe I may say in the world, it will be necessary that I should enter somewhat into the detail of its various branches, in order that the subject may be rightly understood, and its practical utility properly judged of. Therefore I ask before-hand for your indulgence and that of your readers.

It is an admitted maxim, that to produce good crops of any kind, three things are *essential*. 1st. That you have good ground, well prepared and *suitable* to the crop. 2d. That you have good and sound seed; and 3d. That that seed be properly put in in good season, and the after culture and harvesting rightly attended to. Now, I believe there is no *theorem* less disputed by agriculturists than that if those three things are known to the farmer, and strictly attended to by him in the cultivation of potatoes, that there is as much certainty in his growing a GOOD and SOUND crop of potatoes, as of anything else he raises from the earth. The farmer who is ignorant of this essential knowledge may rest satisfied that the money he vests in potatoe culture is like so much put into the lottery—"a *chance* that he draws one prize for ten blanks."

The ground selected for potatoes should be dry, where no surface water will rest It should be rich; if not naturally so, it must be made so by a sufficient quantity of good manure. It should be ploughed twice, and at least twelve inches deep. After the first ploughing it should be harrowed and CROSS harrowed; and, after the second ploughing, harrowed again, and if not very friable and free from clods it should then be rolled. The mould cannot be too fine, as on the depth of the ploughing, and fineness of the earth, depends the retention of that moisture so indispensable to the health and maturing of all bulbous roots in particular. The ground thus prepared, should then be opened off in *drills*, three feet from the centre of one to the centre of the other, and if practicable, running north and south. When opened, if manure is to be applied, it must then be hauled in in carts; the horse going down between the drills, the bed of the cart will cover two drills, where the manure can be pulled out at intervals, in quantity sufficient, not only for the two drills described, but for one on each side in addition; all of which one hand, following with a fork, can easily distribute and spread in the four drills.

This done the ground is ready for the seed. I shall first describe the whole of the cultivation and harvesting necessary, and then speak of the seed and its preparation separately. The seed should be dropped on the manure, twelve inches apart, and as quickly as a drill is planted, the plough should follow and cover it in. The *double mould-board* plough, which is the propper implement for the business, will cover two drills by going once up and once down the field; if the single mould-board plough is used, it will of course cover but one drill by the same operation. When your ground is thus gone over, your land will all be in high drills, and can rest so for about one week, when you must take a two-horse harrow, and harrow your drills *across*, leaving your fields as level as before your drills were opened. There is no danger, as some would suppose, of disturbing your seed. In a few days, when you can see your plants distinctly above ground, from one end of your drills to the other, you must take your one-horse plough, and go up and down each drill, running the *land side* of your plough as close to the plant on each side as you safely can, throwing the earth *away* from it, which operation will leave your field in raised drills between your plants. In a few days after this you take your *double mould-board* plough, and go down the centre of the blank drills, covering all your plants nearly out of sight, observing as you go along that the weight of earth is thrown *against*, and not *on*, the plants. Then, in some days after, when your plants are well over the top of your drills, take your scuffle, an implement not unlike your cultivator in this country, and for which the cultivator can be substituted, and go over your whole field between the drills, giving the earth a good stirring, and not be afraid of encroaching a little at each side on the drill. At this stage, a boy should follow the scuffle, and pull up any weeds that appear on the top or sides of the drills. In a few days after this, when your plants are strong and well up, you go down the centre between the drills, with your *double mould-board* plough, the wings well apart, and throw the earth well up to the plants. This must sometimes finish the cultivation, if the vines have spread and are closed too much, but *generally* the vines will allow it, and the crop be much benefitted by one more scuffling; but this time take *particular care not to disturb the drill at the bottom*, as the bulbs are now forming and spreading; then gently run your *double mould-board plough* through the whole field again, *narrowing the wings of it*, which will have the effect of adding the earth, and compressing it to the *bottom* of the drill, where the bulbs are forming, rather than throwing it up to the stalk at top, where there is sufficient already. This finishes the cultivation.

To dig them out, you have only to take the coulter out of your two-horse plough, and enter the plough a little to the *left* of the centre of your drill, and at a depth *just under the bed of the seed*, and you throw up all your potatoes, sufficiently for the pickers to follow and take them out with the hand. When your field is thus gone through, take your heavy two-horse harrow and harrow *across* your drills, which will throw up every potato, that may have escaped the plough or the pickers, and your crop is finished out so far. Next comes the storing of your crop. *No potato should be housed in the fall*, but those intended for immediate use—*all others should be pitted*. I will here describe the mode of pitting, as it appears to be the general impression in this country that the only safe way of keeping potatoes is in a cellar. The idea is wrong, essentially wrong. As much of the crop as can, (conveniently at the time of digging,) should then be hauled as near to the barn and cattle sheds as practicable, and there pitted about two hundred bushels in a pit. The ground as high and dry as can be selected. The pit should be commenced *by simply levelling the surface of the ground*,

about six feet wide and sixteen feet long. It may be longer if you please, but should not be wider. The potatoes are then placed *upon* that leveled surface and heaped, slanting gradually inwards, until they reach one foot in width at top. Then the whole should be well covered with *sound* and *dry* straw; hay being so much more succulent, is very liable to rot, and consequently unfit for the purpose. This done, begin covering with the earth from around the pit, leaving a set-off at bottom, of about eighteen inches, and *on that*, carry up the covering that thickness to the top, beating the earth occasionally *downward*, (not *in* against the potato heap,) so as to make it solid. About the centre of the top of the pit leave a small round hole, which fill tightly up with straw or hay, and if the heap begins to heat, this air-hole will permit the heat to escape sufficiently to prevent all danger of rotting. However, such precaution *is rarely needed*, the thickness of earth being generally sufficient to keep the potato at its proper temperature. The top of the pit should be covered on the OUTSIDE with either a grass sod, or long drawn straw, covered with a spadeful of earth beaten over it to prevent it cracking from the weather; as either wet or wind getting to the potato will materially injure, if not destroy it. This covering will be quite sufficient until very hard freezing, and then, before the earth is frozen more than three inches deep, every pit should be well covered with half-rotted *stable* manure, sufficiently to prevent frost penetrating farther. When the frost is entirely over, then have the manure taken off of your pits. If you are feeding your potatoes to stock of any kind, you need never be afraid of opening a pit on the south side, (even during the hardest frost,) and taking from it one or two days' provision at a time, and closing it up tight with straw and manure again, you will find no more than a few of the outside potatoes, if any, even touched by the frost, which will never injure them when cooked the same day.

A cellar is not only *useless* but indeed *injurious* to the potatoes on a farm. For family use, potatoes should always be in the house at least a month before used, and in a situation where they would have the benefit of *much heat from the fire*. In Ireland, where, if they have nothing else good, all, EVEN THE NATIVES, allow they have the best potatoes there. Every one has his potato house, if heat in no other way can be introduced, a fire is made two or three times a week, the door shut, and the potatoes allowed the full benefit of both the heat and the smoke.

In the poor man's cottage, the potatoes for family use are kept on a loft immediately over the fireplace, constructed of hurdles laid on beams, where they have the full benefit of heat and smoke, and off that loft comes the best and sweetest potatoes I ever tasted in my life. *The potatoes intended for seed should never be taken out of the pit until they are going to be cut for seed*, unless they are found to be sprouting, in which case, when discovered, if too soon for preparing the seed, they should be carefully turned and covered up again, which will be found sufficient to check the sprouting.

In speaking of seed, and their preparation, I must go back nearly thirty years, for its right history. The year 1815 or 1816, I cannot now say which, was a memorable year for Ireland; the potato crop almost *entirely* failed, giving little more than sufficient for the seed of the next year. Many, very many, poor persons died that year from starvation! At the time of digging, it was generally observed that the set, or seed, was found *sound* and *entire*, but *no sign of its vegetating*, and in many instances the pith was eaten out by some grub, and the shell remained dry and sound. This of course was very generally noticed in the papers, and attracted the attention of scientific men. About this period I was placed with Mr. Patrick Shirreff, (one of the most scientific and practical farmers in Europe, as is evinced by his contributions to the "Quarterly Journal of Agriculture,") of Mungoe's Wells, near Haddington, in Scotland, for instruction. I found him in correspondence with the late Mr. Knight, of Herefordshire, England, making inquries in conjunction with him as to the causes of the failure of the potato crop in Ireland previously. Coming directly from the country, I was of course applied to for all the information and assistance I could render, and at my suggestion, Mr. Rorke, near Dublin, Mr. Nesbitt, near Dublin, and Mr. Kate, of Edinberry, in the King's county, the three largest growers of potatoes in the kingdom, (the latter seldom having less than two hundred acres of potatoes in cultivation,) were consulted, and their assistance procured to carry on the experiments subsequently made. After carrying on these experiments for three or four years, although differing on some minor points, they ALL AGREED on the MAIN CAUSES of the failure of the crop, which was published in the agricultural papers of the day; and which I shall now relate to you, without attempting to enter into the details of any of the experiments.

First, they became satisfied that the CHIEF *cause* of the failure was owing to the potato crop the PREVIOUS YEAR having become *over-ripened*; the season was unusually fine, the crop ripened much earlier than common, and was neglected to be dug out by the farmers until the usual time. The consequence was, that the *sets* from that crop had, in a great measure, LOST *their germinating property*, in which opinion they were confirmed by the fact, that all the sets that had germinated were noticed to have been principally those from *the waxy end* of the potato, as it is termed.

The grub eating the set, as well as the cause of its rotting, was decided to have been occasioned by the want of lime, which they found to be the only effectual application to heal the wounds and form an incrustation on the incisions that would guard the set from rot, as well as from the attack of the grub-worm. This was the whole secret. To prepare the seed you must select well shaped, even potatoes, not too small, nor too large. Cut them, leaving one good eye at least to every set; prepare them from two to three weeks, *at least*, before you plant; and each day as you cut roll your sets in pulverized lime, and spread them on the barn floor to dry; when dry, heap them in a corner till taken out to plant. If this plan is pursued, and the ground selected and prepared as directed, you may rest satisfied that so sure as the laws of nature are invariable, and that like effects follow like causes, as sure will a *good* and *sound* crop of potatoes be produced in this climate as in that, with no variation in the result, except what may be occasioned by the vicissitudes of the season.

Ten tons of potatoes, two thousand two hundred and forty pounds to the ton, is considered a *fair* crop in Ireland. Twelve tons an *extra* one—equal to three hundred and seventy bushels the first, and four hundred and forty-four bushels the second, allowing sixty pounds to the bushel, which I have found to be about the average weight of a bushel here. I have grown four crops of potatoes in this country, in two different situations and latitudes, (six acres the smallest quantity cultivated any season.) Each crop was treated in every particular as here described, and in three instances out of the four, I got a little over four hundred mearured bushels to the acre. The fourth crop was only about three hundred and fifty bushels to the acre, caused by the peculiarity of the season, which produced an almost entire failure with my neighbors, under their management.

These results have satisfied me that, under proper cultivation, we can raise as large a crop of potatoes in this latitude, or, anywhere north of it, in this country, as they can in Ireland, and with as much certainty; although, from some cause as yet unknown to me, the quality, both in flavor and mealiness, is GREATLY INFERIOR to the potato of Ireland.

My intention being alone to show, that, *under proper management*, no farmer need ever have to complain of a failure of his potato crop, from bad seed, or rot, (either in or out of the ground,) or from the attacks of grub-worms, I deem it unnecessary to add to this already too lengthy communication, by giving any of the many reasons why potatoes should invariably be planted in *drills*, and the seed *cut*, and not left whole, other than this summary one, that no good farmer for the last thirty years, at least, has thought of adopting any other plan.

If only one farmer in each State, within the potato-growing region, will be induced by this communication to adopt the simple mode of cultivation (*strictly in every particular*) here laid down, I am as well convinced as I am of any other known truth, that in five years from this time no more complaints will be heard of the ills and diseases that the potato is said to have been heretofore subject to, and if such a result is brought about, I think, *the natives in this instance, at least*, will be thankful that a foreigner is not restricted from giving his vote and influence to change the *constitution* of the POTATO CROPS of the Union, before he has resided twenty-one years in the country.

Respectfully, yours,

GRAZIER.

An entirely new race of horses has been introduced into France from Egypt, called *nedjdi*.

IMPROVED BREEDS OF CATTLE—DURHAMS AND HEREFORDS.

The Improved Durham Short Horns, have, for many years, been considered as at the head of the several breeds of neat cattle, and been set down as the *aristocracy of the barn-yard*, "*par excellence*." But we believe that there is another breed that is fast coming into high esteem, and we should not be surprised if it finally crowded the Durhams off the track, and those are the Herefords.

We see by a number of the Mark Lane Express, which a friend has handed us, that at the Smithfield (England) Cattle Shows, they are certainly taking the lead. At the Smithfield Club Prize Cattle Show, last fall, it was found that they increased in number and in interest. In 1843, there were exhibited 22 Durhams and 37 Herefords; in 1844, there were exhibited but 15 Durhams, while the Herefords amounted to 47.

In the same paper we find the following remarks: "Amongst those of very superior quality, may be mentioned four extraordinary Hereford steers, belonging to Mr. Cothers, of Middle Astor, Oxfordshire, and some belonging to William Hay, Esq., of Sheathend, of his own breeding and feeding, which drew forth marked commendations from the salesmen and drovers." The writer adds: "In noticing the 'prodigies' of the show of beasts, we have to refer to the 13 Durhams and Short Horns sent by Sir C. Knightley, which for symmetry and weight were never excelled. These extraordinary beasts, the whole of which were under five years old, were the admiration of all beholders, while there was only one of them under 200 stones (S lb.) The next in importance, as to quality, were 30 Hereford and Sussex beasts, the property of Mr. Senior, of Broughton House, near Aylesbury. Many of them weighed upwards of 250 stones, and were sold at from £50 to £60 per head. Mr. Senior, it will be noticed, was a successful exhibitor at the club's show. We have now to notice the 43 Herefords offered by Mr. Rowland, of Crislow. This stock, considering the number shown by one gentleman as his own property, was decidedly the best in the market, though we consider that one of the Herefords sold by Mr. Senior was superior to anything we almost ever saw. Mr. Rowland exhibited an animal which carried off one of the prizes at a local show a few weeks since. Having particularised the beasts in this great exhibition, we shall now proceed to take a general retrospect of the supply. On many former occasions, we have had to notice a great preponderance of some breeds, especially the Herefords, over the others, both as respects number and quality; but to-day there was more evenness in them than we ever recollect. On the whole, however, the Herefords stood at the top of poll, both in weight and symmetry. The next in importance in these particulars, were the Devons, next the Durhams, the next the Short Horns,* and the next the Scots. In speaking of the last breed, it is placed beyond a doubt that the show was the very best ever noticed."

We believe, as yet, that there are but few of the Herefords in the United States, and those belong, principally, to the Messrs. Corning and Southam, of Albany, New York. The Durhams have become universally known, and have strong advocates. They are a justly celebrated breed, and, of course, the Herefords will have to win their way slowly against the opposition of strong competitors; but we have no doubt they will do it, and may ultimately become, at the north at least, the favorite breed.—*Maine Farmer.*

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*"Short Horns"—i. e., not the *Improved* Short Horns or Durhams.

Simple and Effectual Remedy for Hove in Cattle.—Try the remedy of an eggshell full of tar, rather that attempt the barbarous practice of sticking. If two men hold the animal's head straight, a third its tongue to the right side, he can easily put down its throat an egg-shell full of tar, and in ten minutes relief will usually take place; but a second dose has never failed with my cattle, which are always kept at a brisk walking pace through the yard until relieved.—*Dublin Farmer's Gaz.*

To protect Hens from Vermin.—A gentleman from Hanover requests us to state the fact that *pennyroyal*, woven into their nests, will perfectly and certainly protect hens from the annoyance of vermin. He generally makes the nest entirely of this strong-scented herb.—*Southern Planter.*

THE AMERICAN FARMER.

PUBLISHED BY SAMUEL SANDS.

REPORT OF THE COMMISSIONER OF PATENTS.

We have only had time since its reception, to cast our eye over the last Annual Report of the Commissioner of Patents, recently presented to Congress; but in the hasty glance we have given it, we find much to interest our readers, which we shall in due time, take much pleasure in presenting to them.

We are indebted to the Hon. Mr. Ellsworth for the copy of the Report received, and tender him our acknowledgements for this renewed evidence of his attention.

GUANO—We have seen a letter, received by the last steamer, from the Agents of the Peruvian Guano Company in London, dated 3d Feb. inst. stating that their sales in three or four days before said date, amounted to 7500 tons, at £10 stg., 2½ per ct. discount for cash; and that their scale of prices for the last *two* years has been,

1 ton and under 15 tons,	£12	per ton of	2240 lbs.
15 do. and under 30 tons,	11	do	do.
30 do. and upwards,	10	do	do.

It will be seen, therefore, that the Agents in the U. S. are offering their cargo at much lower prices, according to quantity, than is obtained in England. We have reason to believe, that had the American Agents in Baltimore and New York received the advices brought by the Steamer, prior to the announcement of their present scale of prices, they would not have felt themselves justified in making the reduction which has taken place; and the probability is, that when the two cargoes now in the country have been disposed of, if others are received, the prices will be advanced—those therefore who intend to test the virtues of the article, should lose no time in supplying themselves, as we know, that since the late change in price, a heavy amount has been disposed of, and there will shortly be but little in first hands in this city. To enable farmers, planters and gardeners, to give it a trial on a small scale, at the lowest rates, we have determined to sell a lot purchased by us from Mr. George, at $2.50 per 100 lbs. for any quantity not less than a bag—*for cash only.*

POUDRETTE—A gentleman in Anne Arundel, Md. writing to us relative to this manure for the coming spring crops, thus speaks in regard to a former lot with which we had supplied him:

"I used 20 barrels last year, which was applied in the drill and in hills to corn, beans, peas and potatoes, and found it a very convenient and efficient manure."

Another gentleman of the same vicinity, informed us that he attributed the saving of all his tobacco plants from the effects of drought, to the use of poudrette.

We supplied, last season, an honorable member of our State Senate, with a lot of poudrette for his own use and that of his neighbors, on their tobacco beds—will he oblige us with a statement of the result of the experiments made, whether favorable or otherwise?

A. Shriver, esq. of Carroll county, experimented with poudrette on corn, last year, and was so well satisfied with the result, that he says he "will go into it on a large scale next season."

We annex the following statements relative to the use of Poudrette, which we copy from the last Philadelphia "*Cabinet.*"

Mr. Floyd Howell, resides in the county of Onondaga, 17 miles south of Syracuse, in this State [N. York]; to whom 19 barrels, or 76 bushels, were sent late in Nov. 1843; upon which a freight of $1 37 per bbl. was charged, which increased its cost to $2 87 *a barrel* on the farm. In reply to inquiries made in relation to its effects, the following answer is given, viz.

"We took 5 acres of wheat stubble, which we supposed would yield, *without any manure*, from 35 to 40 bushels of corn to the acre; ploughed and harrowed it once, the forep art of May; then marked it in rows about 4 feet apart, but owing to the cold weather, did not plant until about the 16th of the month, when we dropped a handful of Poudrette in each *hill*, or 14 barrels to the five acres—then planted the corn upon it. After it came up, and *before the first hoeing*, we put 4 barrels more upon about *one half* of the field. The corn was hoed three times, and was ready to harvest a little earlier than our neighbors; but we could not perceive any *material* difference between that part of the field where the 4 barrels were applied as a top-dressing, and the part where it was applied *only in the hill.* There was no other manure used than the poudrette. *The average yield* upon the 5 acres, was 80 bushels to the acre; but from one acre selected, we gathered 99 bushels and 18 lbs. The freight on the 40 bbls. sent by you last year, will not exceed what was paid last year, —$26 on 19 barrels—owing to its having been shipped near the close of navigation."

From this it will be seen that, by the use of 18 bbls. or 72 bushels of poudrette, on the 5 acres, the yield was increased from 35 or 40 bushels, to 80 bushels per acre, or over 200 bushels on the field.

Mr. R. Henry, of Cranberry, N. J. says, Dec. 27, 1844:

"For the last 4 or 5 years I have used poudrette with uniform success on corn, and find it to answer on that crop better than *any other manure* that I use. The corn, where it is used, is generally of a better color, and comes to maturity earlier than where other manure is used. My mode of applying it is in the hill; the ground being previously prepared, with about 40 or 50 bushels of lime to the acre. This is the only way in which I have used it; and last season the corn was on a dry soil, and although the season was also dry, the crop of corn was good where Poudrette was used. I consider it a cheap and profitable manure."

Mr. James Hay, of West Chester county, N. Y., made the following statement in relation to its application to potatoes. He says:

"I planted (No. 1) about 1 acre of potatoes, with Nova Scotia seed, the last of May. The ground was manured with horse manure the fall previous, and the potatoes planted in drills, with coal ashes. The growth was luxuriant, and bid fair to yield a heavy crop, but they were apparently struck with disease or blight about the middle of July, as though there had been a frost, and the vines gradually died. They were dug the latter part of Aug., were in size from a shot to a middling sized potatoe; and the skin could be easily slipped off between the thumb and finger, and the potatoes were of little value.

"On the first of June I planted [No. 2] another acre of potatoes, with *poudrette* in the drill—32 bushels to the acre. The vines were not as flourishing as where the horse manure was used, nor was the effect of the blight or frost as visible, though they were evidently affected by the same cause. They were dug about the middle of Sept. and the yield was 150 bushels of uniform size, tho' small, perfectly sound and free from disease They were of the *Mercer* kind, and the seed was raised about ten miles distant, in Westchester county.

"The same seed (No. 3) planted at the same time on rich ground, with stable manure, made large vines, but the potatoes were very irregular in size, and nearly half rotten. These were not dug until the 1st of October. None of the potatoes here spoken of, *except those raised with poudrette*, were considered fit for family use.

For early potatoes, he planted the *Mercer* of his own raising; about the last of March manured them with horse dung, and got a fair yield of good sound potatoes.

"On corn the result was as in former years, and when planted one or two weeks later, the corn was fit to harvest a fortnight earlier than that of his neighbors, who used stable manure."

Mr. Peter Hall, of Norwalk, Con., informs me, that he "used Poudrette in the fall of 1842, with barn-yard manure, on a field of wheat. The result was extraordinary —yielding *thirty-two and a half* bushels, weighing over 64 lbs. per bushel, to the acre. He also used it on corn the past year, 32 bushels, or eight barrels per acre. Part of it was put in the hill at planting, and the balance was spread on the surface previous to the second hoeing. The corn was planted a week later than his neighbours planted theirs, and was fit to harvest nearly two weeks earlier, and it was believed from the appearance that the produce was greater than upon any other field in the neighbourhood. On potatoes also, its effects were remarked by every one who saw them. Those manurek with poudrette could be distinguished from those treated with stable manure, as they passed along the road, and on digging them, very few, if any, were found diseased."

Your obedient servant, D. K. MINOR.

N. York, Jan. 21st, 1845.

The editor of the "Cabinet" adds:

"The above statements have been communicated for the Cabinet, and we cheerfully give them a place. It is, perhaps, unnecessary to remark, that the Poudrette referred to above, was procured of D. K. Minor, and was prepared at his establishment in New York. The manufactory in this city [Philadelphia] also belongs to him, and is under his supervision; and the editor entirely believes that all reliance may be placed in a proper preparation of the material. We were unable, last spring, as many who were disappointed will remember, to supply the wants of our farmers: and a very brisk demand, when the season opens, is again anticipated. The reports of those who got the article at this office last spring, are almost without exception, favorable to its use. Of that put on wheat in the fall, we cannot, of course, give any account as yet."

[☞Those who intend giving the poudrette a trial this spring, should, to prevent disappointment, have their orders handed in without delay. We expect to receive a supply shortly from Mr. Minor's establishment.—*Am. Far.*]

GROUND IVY INJURIOUS TO SHEEP—REMEDY.

For the American Farmer.

Extract of a letter to I. S. S. *from a lady of observation.*

I don't know that you know that Ground Ivy will kill kill sheep, and that eggs will cure them immediately; let one person open the mouth and another break the eggs. Two are sufficient, and a sure cure.

The above is so important, that it ought to be preserved. It is one of those things that "if it does no good it can do no harm to try it." It is understood that in attempts to raise sheep in our Allegany lands, so well adapted to them otherwise, experiments have entirely failed, especially where the flocks have approached 100 in number. From their dying suddenly and being in good condition, is it not the ground ivy which poisons them? probably. It would be a pity that any such bane should forbid sheep husbandry in a country so healthy and so remarkable for the excellence of its crops of *oats and Potatoes.* S.

WORK FOR MARCH.

Should this month come in with its hurly burly winds, as in times of yore, but a few days will be sufficient to prepare the earth for the active operations of the field, so it is full time for farmers, planters, and all others, who seek in its bosom for the means of support to be making their arrangements, in order that when the time for laboring comes, there may be no necessity for sending to the blacksmith and the wheelright to have implements repaired. Let every one then, *go*, not send, to his tool and implement house, personally handle and inspect every thing of the kind, and have all that may require it put in the very best repair, for he may rest assured that unless his tools and implements be in such order, it is useless to expect *good work*, and every farmer should make up his mind not to be satisfied with anything else, as it is fallacious to expect fruitful crops where the soil is not well and deeply ploughed, and thoroughly pulverized by harrowing, and he may rest assured, that unless his ploughs and harrows be good, and in *good* order, he need not expect *good* work from them. An indifferent plough will cut an indifferent furrow-slice and turn it as *indifferently* well; so also will a snaggle toothed harrow make a tolerable effort at pulverization, but, both combined, can never do such work as a good farmer and planter should exact at the hands of their workmen. Some lands, as every body knows, are much easier worked—much easier reduced to fine tilth, than others, and that the labor of cultivating such is much less both to man and beast, but there are none, which cannot be, with proper attention, put in tillable condition, and

hence the great aim of every husbandman should be, to have to say, that he had used all possible diligence in the preparation of his soil—that he had gone to work upon it with the determination of making *one* acre produce as much as *two* had done in former years. He that operates with these ends in view, will succeed, in defiance of *low prices* and *high taxes*, as, from the increase of production he will fill his coffers. Having mentioned high taxes in this connection, lest an improper influence may be drawn from it, we will disclaim all sinister motives, and say out boldly, that the obligations of the states should be met in the full measure of a hundred cents in the dollar, and that nothing less than that will ever redeem their *honor*, which, in the heart of every patriot, should be held as a priceless jewel. He who permits the idea of *improvement* to to take an evergreen hold of his mind, and who may exert all its energies to increse the fertility of his land, will find, before long, that county and state exactions are all moonshine—mere circumstances—that should not be permitted to disturb the equanimity of his mind for a moment. But while we thus urge our friends to direct their attention to the melioration of their land—to the increase of its fertility—we would kindly whisper in their ears, that one of the surest means to effect this desired object, is to till less land, and strive by all possible ways, to manure what they may till, as there is no use in gratifying the idle pride of being able to point to *large fields*, if it takes from *three* to *six* of the acres of such fields to produce what *one* good acre may be made to yield. We have seen many a field of corn in our day, which, after barrels of sweat had been expended in their culture, that never sent 2 barrels of *good* corn to the crib; whereas, had a moiety of the labor bestowed thereon and *lost*, been appropriated to the collection of materials for composting manure, every acre might have been made to grow from 6 to 8 barrels. If this difference in result can be produced, and we firmly believe that it can, we ask, is it not worthy of every one to make an essay to reach a goal so inviting—so full of hope—so fruitful of promise? We say it is, and we conjure all, by the ties of brotherhood and patriotism, to summon to their aid that resolution which will impel them *onward*.

With these preliminary observations, by your leave, we will endeavor to point out some few of the many things which should be attended to

ON THE FARM.

Wheat Fields.—It should be the business of every wheat grower to examine the water furrows in his wheat field, and have every thing cleaned out of them that can in the least impede the free passage of the water. This duty performed, if he is within reach of a supply of *Guano*, let him procure as much as will enable him to sow too hundred weight on each of ten or twelve acres, so that, by comparison with the adjoining grain, he may be able to test the virtues of this popular manure. If it possesses the fertilizing properties—the powers of production and lastingness ascribed to it by the concurrent testimony of all who have tried it—it certainly deserves and should receive a catholic adoption.

Sowing Clover.—All who may not have already sown Clover seed on their wheat fields, should do so at an early period; so firmly convinced are we of its fertilizing properties that, time and opportunities permitting, we would sow clover seed upon all our grain fields, whether we intended to permit them to remain in grass for hay or pasture, or to plough them up at the end of the season. But we would, so soon as our grain was cut, sow a bushel of plaster to the acre to encourage the more rapid growth of the tender clover plants, in order that they might make shade to protect themselves from the burning suns of summer, and in all the more Southern latitudes than Maryland we would mix Orchard Grass seed with that of the clover, say twelve pounds of clover seed to half a bushel of Orchard Grass seed. The latter by its rapid growth and capacity both to afford shade and withstand a scorching sun, would protect the clover plants, and prevent them from being summer killed. Where the farmer or planter may intend that his Clover fields are to remain in meadows, the hoof nor foot of beast should not be permitted to tread thereon the first season.

Oats.—The earlier this crop is got in, the greater certainty will there be for it to make a good yield; but it is useless to expect large production without the soil be good and suitable to the nature of the oat plant, and wherever there may be any doubt of its fertility, means must be used to supply the deficiency. If nothing else is at command, let a compost be made of two bushels of ashes and one of plaster to the acre, sow it evenly over the field—the ashes will dissolve the sand, form a silicate of potash, and thus impart to the straw the capacity to stand erect and face the wind, while the plaster will attract pabulous gases from the atmosphere, whereon the plants may feed, give volume and substance to the kernel, and ensure its perfect fructification. Than oats, there is no grain that grows which holds a warmer corner in our heart than it—we *esteem* it, because of all the feed that enters into the consumption of that noblest of the domestic animals—the horse—it, above all others, imparts to him the greatest amount of capacity to endure fatigue and perform labor—because it weaves around his muscles and thews and nerves the armor of elasticity—because it gives him wind and heart and spirit to wrestle in strength and endurance with the burdens of his task master—we *love* the *oat plant*, because of its weakness—because it generally shares the fate of the step child, and is shoved to some obscure corner to breathe out its griefs amidst sterility and neglect. Common report—nay received opinion imputes to this undervalued grain the character of being an impoverisher of land—it may be so—but whether so or not we shall not stop to combat the belief, for if we were able to demonstrate with the clearness of light that the opinion was unsound, he who might be "convinced against his will, would remain of the same opinion still." We are aware that, in proportion to the rapidity with which any plant may grow and mature its fruit, so within a given time, does it extract from the earth a comparalively greater amount of nutriment, regard being had to time, than some other plant that requires a longer time to grow and mature its fruit; but this does not prove that the aggregate quantity of nourishment is greater in the one case than the other. Again, oats are most generally sown on the poorest field on the farm, and because a good crop cannot be grown the succeeding year where nothing would have prospered ere the *oats* had feasted on exhaustion, they are denounced as robbers of the earth—as vandal desolators of its fat and riches. A word or two more and our plea in behalf of this oppressed and reviled crop will be at an end—give it the benefit of a congenial soil and climate—sow early and give to the earth plenty of seed, and it will more than yield a fair remuneration for every favor bestowed upon it—a hundred and upwards of bushels to the acre has often been raised, and no one should rest contented with less than fifty, and this quantity may, under proper circumstances and culture, be realized, and with such yield no one should grumble.

Preparing the ground.—The ground should be ploughed deep—say 7 or 8 inches, thoroughly pulverized, and after the oats are ploughed in 2 or 3 inches deep, not more, the ground should be harrowed finely and then rolled with a heavy roller, so that the earth may be compressed around the seed and facilitate its germination.

Quantity of seed to the acre.—From 2 to 4 bushels to the acre has been found the best quantity.

Barley.—There is we think too little of this grain sown in our country. Its grain when chopt makes one of the best and most substantial messes for horses and stock generally that is to be found in the whole catalogue of cattle meat. As an alterative or change of diet it is invaluable. In good sandy loam, moderately dry, it will yield from 25 to 50 bushels to the acre—its straw is well relished by cows and oxen, is nourishing and serves to eke out winter provender, the grain itself will sell more readily and bring a better price in the market than Rye. In a word, Barley, generally speaking, is a certain crop, while Rye is to say the least of it, as precarious and fickle in its yieldings as some female bipeds we have heard of in our younger days.

Clover Fields.—All Clover fields should be dressed with a bushel of Plaster to the acre.

Lucerne.—We have often advised our readers to try a few acres of this valuable grass. Whether cut green and fed to horses and cattle, or cured into hay, it is one of the most profitable of all the artificial grasses. It may be cut three or four times a year.

Corn—It is time to be putting the corn ground in order, and while the grower may be making his arrangements, let him not forget that his success will mainly depend upon the pains which he may bestow in the preparation of his ground—that he should plough it deep, pulverize it finely, and manure it with every thing in the shape of fertilizers which he can command, giving it to it broadcast, and with a liberal hand, not omitting to give to each hill a mixture of ashes and plaster, in the proportion of 5 bushels of *ashes* and 1 of *plaster* to the acre. This may appear a small quantity to be spread over several thousand hills, but small as it may be, there is enough of the virtue of fertility in it—enough of the peculiar food of the corn plant,—to impart to it the capacity to increase its yield fully 25 per cent. Early planting we advise as the safest and best practice, besides affording time for replanting in the event of the plants being cut off by the worm, or any other of the numerous enemies and ills to which they are subject. If the cut-worm should be feared, two bushels of salt to the acre might be found to prove their quietus, while it would not fail to be of service in promoting the growth of the plants.

Old Fields.—We have often advised the passing a harrow over them, and we again repeat it, as also that a bushel of plaster should be sown over each acre just before or immediately after a rain. With such treatment we have no doubt that good milk yielding pastures might be produced in a few months, if cattle in the mean time were kept off of them.

Grain Fields.—These, when the ground is sufficiently dry, would be benefitted by being harrowed and rolled.

Liming Lands.—Every owner of a farm that has not already been limed, should make every effort to give to his cultivable land a dressing of lime, as without he does so, he never can expect to effect any thing like permanent improvement. If he should not be able to give to each acre 100 bushels, fifty will suffice, and even twenty five bushels will answer a most valuable purpose. Indeed, in soils exhausted by improper culture, we would not advise the application, at a single time, of more than the latter quantity.

Working Horses, Working Oxen, and Mules.—Each and all of these animals should receive increased attention in grooming and food, in order that they may go forth to their labors with strength and spirit.

Milch Cows—These useful creatures at this critical period of the year should have nourishing slops, or roots given them that they may bring forth their young in vigor and dispense liberally to the pail. A little Linseed Meal mixed in their messes will be found of service.

Sheep.—Let the ewes which are in lamb be well attended to and receive, daily, a portion of bean or other meal, be salted regularly, and receive also a mixture of tar and salt or pine bows to browse upon.

Orchards.—A careful examination should be made of the orchard, and all dead limbs cut off. Any limb that

may be taken off should be cut into the sound wood, care being taken to make the surface perfectly smooth. Where the limb may be large the surface should be covered with a compound made of equal parts of clay and moist cow dung, made into the consistence of a thick paste.

Early Potatoes.—Any time after the middle of this month early potatoes may be planted, care being taken to give them a place in dry soil and plenty of manure, and to strew lime and salt over them as they may be covered.

Mackay and Bedford Hogs.

To the Editor of the Massachusetts Ploughman:

Sir,—You having requested my opinion regarding Swine, the various breeds, properties, &c., my remarks for the present will be mostly confined to my favorite breeds, viz: the Mackay and Bedford. These are local names, but will be explained by giving an extract from a communication published in the Zanesville Gazette, Dec. 5, 1838, on the Mackay breed, by Sandford Howard, Esq. (now of the Albany Cultivator,) also extracts from communications by the Hon. Levi Lincoln, and the late Hon. Oliver Fiske, of Worcester, published in the 3d volume of the New England Farmer. Although now about twenty years since the latter were published, so much the better, for time has proved the correctness of those distinguished and intelligent gentlemen's opinions at that period; and the public good requires that it should be republished. I will here observe that something depends on location, as respects the breeding and feeding swine. The same will apply to most domestic animals; therefore I speaks as regard New England soil, climate and habits.

From my experience, I prefer the Mackay, next the Bedford breed. I consider the Mackay breed the best I have ever known, combining, in a great degree, early maturity, light offal, good shoulders, back of loins, holding their breadth remarkably well, from the joining of the head to the setting on of the tail, full breast, great depth in carcase, and better filled within, than any others I have ever seen opened; coats white and glossy, flesh firm and solid, and cooks with the least waste; skin or rind, when cooked, sweet, crumpy and easily masticated, returning the greatest weight of pork for the given quantity of food, the steel-yard almost universally giving higher weight than the eye. The Mackays frequently, when killed and dressed at 12 months old, weighing 400 lbs., and when kept 18 months weigh from 5 to 600 lbs. each, dressed; they have been killed at 11 months old, weighing 400 lbs.

I frequently visited Capt. Mackay, and considered his selections and crosses of swine very judicious, and agree with Mr. Howard in his remarks respecting the same.

I purchased of Capt. John Mackay, Oct. 17, 1832, his breeding stock of swine, viz., two males and three females.

I think well of the Bedford breed. The introduction of this valuable breed of swine into the county of Worcester, by the late Hon. Oliver Fiske, must have been of great service, for every one now at this date, who attended the cattle fairs at Worcester, must have admired the magnificent shows of swine, not forgetting the splendid swine at the show, from the Hospital, situated in Worcester; probably these partook strongly or wholly of the Bedford breed.

The Bedfords are well formed and filled within; bone of the legs a very little larger than the Mackay; coat white and good, not quite so glossy as the Mackay's; their flesh quite firm and solid, with very little waste in cooking.

There has lately been imported from England another breed of swine, which I think very highly of from external appearance.

William Stickney, Esq., of the firm of Messrs. Stickney & Joy, No. 99 State street, Boston, has imported the Suffolk breed; they are of very good promise, and if judiciously crossed on some of our varieties, may make great improvement in our swine; the farmers would do well to secure some of this breed.

The flesh of swine forms a very important item on a farmer's table, in all the various modes in cooking.

Lawrence's Treatise on Swine says—"Pork, of all other flesh meat, is the best adapted to curing and preservation with salt, and has the further merit of never cloying the appetite, for it appears that men will subsist longer upon that diet, without desire of change, than upon any other flesh. And again, it is, doubtless, from its solidity, the most economical, and the most nutritious food."

Swine are fattened more speedily than any other flesh we eat. Milk and grain make the sweetest and best pork. There is no meat that we eat that is so much affected by food as that of pork; hogs fed on oil-cake, nuts, &c., give a very unsavory flavor.

[*Extract from the Zanesville Gazette, by Sandford Howard, Esq.*]

"In regard to the origin of a variety of swine called the Mackay breed, I have been acquainted with that breed of swine for ten years. I have the honor of a personal acquaintance with the gentleman who may be considered the *founder* of the breed, Capt. John Mackay, of Boston, from whom the breed takes its name. I have several times purchased swine of him; have bred and sold many of this breed, and have more than once had from him an account of their origin, which is in substance as follows:

Mr. M. was formerly a sea captain, and for some time commanded one of the Liverpool line of packets. Having always a taste for rural pursuits, and owning a beautiful country residence in Weston, fourteen miles from Boston, he practised for several years, selecting the best swine he could find in the various parts of the world, to which his adventures led him, and carried them to his farm in Massachusetts. In the course of time he had congregated swine from the four quarters of the globe, Europe, Asia, Africa and America.

Of the Asiatic races he had the Chinese, and some (I think) from the vicinity of Calcutta.—After he left the seas, and settled at Boston, he devoted a share of his attention to crossing the different races of swine which he had collected, for the purpose of combining, as far as possible, their several excellencies in a new breed thus produced. By perseverance and judgement, he at length got what my be called a new and fixed breed, to which the public have given his name, and which, for aptitude to fatten, and the attainment of great size at an early age, are unrivalled by any swine ever known in our country. With regard to their having been derived in part from the Berkshire breed, I can say that I never heard that breed mentioned by Capt. M. as one of those from which his breed was descended, but, on the contrary, I think he told me it was not one of them. They certainly have very little resemblance in shape, and none at all in color. Capt. Mackay's swine soon become so celebrated that he carried nearly all the prizes at the Brighton and Concord (Mass.) Cattle Shows, amounting in five or six years to over $200. Individuals of this breed have sometimes weighed upwards of six hundred pounds (dressed) at eighteen months old; frequently four hundred to five hundred pounds. In 1833, Capt. M. killed two at the age of seventeen months, which weighed in Boston market, over twelve hundred pounds. An account of them was given in the New England Farmer.

In 1834, Mr. I. I. Hitchcock, then editor of the Baltimore Farmer and Gardener, ordered me a pair of the Mackay breed. He was at that time making a collection of the best swine in the country, or as he called it, "a general convention of the best porkers ever assembled," among which was the English Norfolk Thin Rind breed, a breed from C. A. Barnitz, Esq. of Pennsylvania, and a very celebrated breed from Virginia. I resided at that time in Hallowell, Me., and the pigs were sent per ship to Baltimore.

In Mr. H's. letter to me, acknowledging their arrival, he says—"As in all other cases of beauty, they had made complete conquests among the sailors, by whom they had been regularly fed and washed. * * * *

I consider these Mackays by far the most beautiful hogs I ever saw." See also Farmer and Gardener, vol. I, pages 113 and 196.

[Extracts from the Hon Levi Lincoln's Letter to the Hon. Oliver Fiske, Cor. Sec'y of Worcester Agricultural Society, dated Worcester, Jan. 24, 1825.]

Speaking of the Bedford breed of swine—"Within a few days past I have had three pigs butchered, from the same litter, precisely 7 1-2 months old. Their weight when dressed was 230, 233 and 238 1-2 lbs. One sold in Boston for 6 3-4 cts. per lb.; the others were put up here for family use. The expense of keeping and fattening these pigs, I am satisfied, was less than with any other breed I have ever raised, and the proportion of bone and offal to the valuable parts, was surprisingly small.—Would it not be useful to farmers to be better informed of the history of this race, and of the time, and manner of their introduction here?"

Agreeably to the suggestion in the above letter, I have obtained the following account of the introduction of this breed of swine from the Hon. T. Pickering. He saw them first on a farm of Gen. Ridgely, of Hampton, 14 miles from Philadelphia. Gen. R. informed him, that they were brought to this country, as a present to Gen. Washington from the Duke of Bedford, who committed them to the care of an English farmer by the name of Parkinson.—This man took a farm in the neighborhood of Baltimore, but instead of sending the swine to Gen. Washington, Parkinson sold them. Gen. Ridgely esteemed them very highly, and sent Col. Pickering a pair of them, in a vessel bound to Salem. Mr. John Reed, of Roxbury, obtained the breed from Col. P.'s stock; from Mr. Reed I obtained the offspring from seperate litters, and transferred them to Worcester, where, by avoiding the breeding directly in and in, I have preserved them without degenerating. The race is most perfect and valuable when unadulterated, but affords a most valuable improvement to our native breed when judiciously crossed. O. Fiske.

T. G. Fessenden, Esq.

See N. E. Farmer, vol. 3, No. 28, page 222.

SAMUEL JAQUES.

Ten Hills Farm, Jan. 29, 1844.

☞Col. Jaques has our thanks for answering our call in so perfect a manner. His opinions of the comparative value of the different kinds of hogs that have been recommended for New England are of value to all. The Mackay and the Bedford we consider decidedly the best breeds that have been introduced.

The new variety named by Col. J. as imported by Mr. Stickney, is called the *Suffolk breed.* It is not large, but it has very good points about it. Mr. Stickney will let us know how it succeeds.—*Editor.*

Dorchester (Md.) Farmer's Club.

A paper was read, and presented to the Club, on the Culture of Indian Corn, by the President, Dr. Joseph E. Muse—

When it was unanimously resolved, that it be published in the Cambridge Chronicle, and that Dr. Muse be requested to continue his paper—for the next meeting of he Club.

For the Dorchester Farmer's Club.

On the Culture of Indian Corn.

The question of the best method of Culture of Indian Corn, is one of primary importance: and reports of the various experiments, that have resulted favorably, may tend to settle the interesting problem.

The partial practice of my method "by late fall, winter or plowing"—"and drill planting," for more than fifteen years; and my exclusive adoption of it, for half that period—and the obvious reasons in favor of it, have concurred to satisfy me, by the general results, in various kinds of seasons, that it is the best mode of growing that valuable staple of our country—and, at the same time, of sustaining, or improving the soil, on which it is grown.

I would be understood, in my remarks, to confine them to lands having a due portion of alumina; and at least, a moderate coating of grass, or vegetable matters of any kind, on the surface.

The method is the following:

During the winter, or late in the fall, the field is plowed under a true, and well turned furrow, sufficiently deep, to avoid returning the sward, in the subsequent work;—the accuracy of this operation, will have considerable influence on the eventual management, and success of the method; if well done, there will be but litle occasion for *hoe* labor, to clear away the grass, as but little will vegetate from the inverted sward.

In this state, the whole will remain, till the season of planting—when a light plow is skimmed over the surface, in the direction of the first furrow—the "corn planter" is then introduced; which furrows—drops—covers—rakes and rolls the corn, in one operation; or, it may be done, tho' more tediously, without this instrument.

The lines in which the grain is dropt, are four feet apart—the grain in the lines, about twenty-four inches—and two plants left.

When the corn is sufficiently large, a light double furrowing single horse plow, is run, as near to the plant, as possible; throwing the earth from it; and as soon as convenient, the earth is returned to it—this is the whole of my plowing;—then follows the cultivator, as shallow, and lightly, as possible, to keep the surface, at all times, friable, and open to the free access of the sun, and air—and not omitting the roller, whenever necessary for fine pul-

verization, which is in all cases, essential to good culture; the drier the season, the more, the cultivator is used: the hoe is but little required in ordinary seasons, for the grass—and never in any season, to make the slightest hill—and the general cultivation is as *level* as practicable.

By the free admission of the fermentative agents—sun and air, the inverted sward will furnish the soil with the soluble, and nutrient gasses—the products of its decomposition, which, tho' volatile, will be fixed by their union with the *moisture—alumina*, and other *substances* in the soil; and this process will happen, chiefly, at a time, to meet the peculiar demands of the plant, whose organic structure, and vital powers, will enable it to seize upon, climate, and apply to its uses the nutriment thus furnished;—ammonia, and nitric acid there generated, and preserved, will abound in the soil—and in fact, a *quasi* nitre bed is formed among the spongioles of the roots, which will not only yield the gasses it may contain, but it will, as is known to every physical inquirer, abstract from the atmosphere, *nitrogen*, indefinitely—without which element—a deficit, of frequent occurrence, the grain, tho' it may form, and ripen, yet it will not contain an essential constituent of food for animal sustenance.

By the culture contended for, the porous surface of the inverted turf, is presented as a sponge, to imbibe readily the ammonia—and nitric—and carbonic acids, held in solution by the rain, and snow which fell upon it, and become fixed, as before explained, for the use of the present, and future vegetation.

Contrast this with the usual practice of spring and summer plowing, and *cross plowing*—and the sward, recently turned, is thrown back into its former position—the grass is as it were, replanted for much *hoe* labor, as it had not remained in a condition to suffer decomposition; or, so far as it had undergone this process, the products are wasted by exposure on the surface, to the action, of the sun and air—and a total loss to the plant, and soil, or nearly so, is the inevitable consequence.

By *drill* planting, too, we may have more than double the number of plants, that the usual method allows in safety—leaving two plants, at a point, the distances named, will make about ten thousand stocks to the acre, and the lines arranged in a North and South direction, they will have abundance of space for air and light.

Practically, I have found this to be true—my crops have suffered from drouth, less than those under the ordinary practice of cross planting; which is manifestly to be ascribed to the continual flow of vapors among the roots, and their ascent around the plant, from the fermenting mass below—promoted by the frequent use of the cultivator, preserving a loose, open surface, and allowing the free entrance of the fermentative agents—heat—air—and moisture.

Much more—in *fact*—and in theory, might be aduced, in favor of the practice indicated, but my paper has already exceeded the limits designed—and I will not now extend the discussion.

JOSEPH E. MUSE.

Feb. 12, 1845.

CHURNS—WHICH ARE THE BEST KINDS?

MR. EDITOR,—SIR: Can you inform me what is the best kind of *churn*, to be used in a dairy of six or eight cows? Taking into consideration, the *time* occupied in churning, the *ease* with which it may be performed and the *state of the butter* when churned.

And, Sir, as your paper bestows some attention upon matters of taste and ornament, as well as upon the more useful, will you also, allow me to ask, how our autumnal leaves may be preserved so as to retain their beautiful colors? My own attempts (made by pressing them in books) have always failed, their bright hues fading, in a few weeks, to a homely brown.

A SUBSCRIBER.

The old fashioned dash churn takes up less room than any—the cream can be put in it, and the butter can be taken out of it more readily than from other churns. This too, is more easily cleaned and the butter is brought in it *sooner* than in any kind that we have ever examined. Yet with all these advantages the dash churn is not in good repute. The labor of moving the dash up and down, by hand, is arduous, and most people prefer more complicated machinery to agitate their cream and turn it to butter.

The *rocking churn* is a long box placed on rockers, and by rocking, the cream falls alternately from one end of the box to the other, passing through a brake of lattice work in the centre. The labor of rocking to churn a dozen pounds is not more severe than rocking a common cradle.

But the *barrel churns* and the *tub churns* with internal wheels, are more common than the rocking or the dash churns. They are in various forms. The barrel churn turns like a grindstone, and stops short at each revolution, to prevent the quiescence of the cream arising from regular motion. This kind has given place to the tub churns that stand still, while a crank moves floats within.

None will agitate the cream so violently as the *dash churn;* but as violent agitation is altogether improper at first, and is not required till near the close of the process, the little tub churns answer the purpose till cold November weather; then a dash churn works better, for more violent agitation is required at the close.

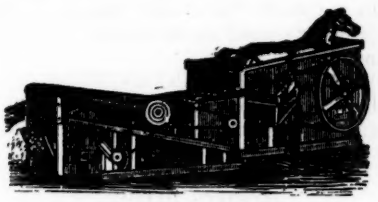
Though upwards of five hundred patents have been granted for churns, many of which we have seen at Washington, we doubt whether any one is moved *easier* than the rocking churn; and we are confident that none will bring the butter *sooner* than the old dash churn.

When water power, steam power, or horse power is used for churning, the machinery is more readily applied to the rocking churn, than to any other. In New York, dogs are taught to churn. We have some doubts whether the question of pre-eminence in churns will be settled sooner than the whole Oregon Territory or the Texas question.—*Ed. Mass. Ploughman.*

Two tea-spoons full of finely powdered charcoal, (says the *N. Y. Herald*,) drank in half a tumbler of water, will, in less than fifteen minutes, give relief to the sick headache, when caused, as in most cases it is, by superabundance of acid on the stomach.

Aristhenes wondered at mankind, that in buying an earthen dish, they were careful to sound it, lest it had a crack; yet so careless in choosing friends, as to take them flawed with vice. How few persons at the present day would ever discover and apply so beautiful and striking an analogy!

Worms and Grubs.—A mixture of salt and saltpetre (nitre,) in the proportion of eight parts of the former to one of the latter, applied about the roots, will, it is said, destroy the worms and greatly promote the health and thrift of the tree.



WHITMAN'S THRASHING MACHINE & HORSE POWER DEPOT, No. 2 Eutaw st., opposite the Eutaw House, where the subscriber now offers for sale all his new improvements in the Thrashing-machine and Horse-power line, consisting in part of his new SEPARATOR, patented March 20th, 1844, which thrashes and cleans the grain at one operation, and is considered the greatest labor saving machine, and of the most value to the farmer of any machine ever invented in this country.

NEW STRAW CARRIERS—These machines thrash and separate the grain from the straw in a rapid and perfect manner, and are highly approved by all.

Improved CYLINDER THRASHERS—Warranted to thrash faster than any other kind of thrashers that can be produced.

Improved HORSE POWERS, on the rail way principle, for one or two horses. These machines are durable, possess double the power of the common kind, and occupy about one eighth of the room. All of the above are made of the best materials, by experienced workmen, and warranted. I will furnish a man to go out with them and set them up in any part of this State, if desired.

As this is no humbug, all who feel an interest in agriculture are respectfully invited to call and examine for themselves.

All orders addressed to the subscriber, Baltimore city, will meet with prompt attention. EZRA WHITMAN, Jr.

y 17

GROUND PLASTER.

The subscriber is now engaged in the grinding of Plaster of Paris for agricultural purposes, and would respectfully inform Farmers and dealers that he is prepared to furnish it of the best quality at the lowest market price, deliverable in any part of the city, or on board Vessels free of expense, application to be made at the Union Plaster Mill, near the Glass House, or at the office No. 6 Bowly's Wharf, corner Wood street. P. S. CHAPPELL, or,

WM. L. HOPKINS, Agent.

BALTIMORE MARKET, Feb. 24.

Beef, Balt. mess,	9a	Butter, Glades, No. 1,	13
Do. do. No. 1,	8a	Do. do. 2,	7a11
Do. prime,	6a	Do. do. 3,	5a7
Pork, mess	12a	Do. Western 2,	6a
Do. No. 1	9½	Do. do. 3,	5a6
Do. prime		Lard, Balt. kegs, 1,	a7¼
Do. cargo,	a	Do. do. 2,	none
Bacon, hams, Ba. lb	7½a8	Do Western, 1,	7½a
Do. middlings, "	6a	Do. do. 2,	5a5½
Do. shoulders, "	5½a	Do. do. bls 1,	6a6¼
Do. asst'd, West.	6	Cheese, casks,	6
Do hams,	7½a8	Do. boxes,	5a8½
Do. middlings,	5½	Do. extra,	12a15
Do. shoulders,	5½a		
COTTON—			
Virginia,	9a10	Tennessee, lb.	
Upland,	6½	Alabama,	6½a
Louisiana,	6½	Florida,	10a12
North Carolina,	10a11	Mississippi	
LUMBER—			
Georgia Flooring	12a15	Joists & Sc'ling, W.P.	7a10
S. Carolina do	10a12	Joists & Sc'ling, Y.P.	7a10
White Pine, pann'l	25a27	Shingles, W. P.	2a9
Common,	20a22	Shingles, ced'r,	3.00a9.00
Select Cullings,	14a16	Laths, sawed,	1.25a 1.75
Common do	8a10	Laths, split,	50a 1.00
MOLASSES—			
Havana, 1st qu. gl	30a31	New Orleans	24a
Porto Rico,	29½a	Guadaloupe & Mart	26a28
English Island,		Sugar House,	28a36
SOAPS—			
Baltimore white,	12a14	North'rn, br'n & yel.	3½a4½
brown & yell'w	4½a5½		
TOBACCO—			
Common	2 a 3½	Yellow,	8 a10
Brown and red,	4 a 5	Fine yellow,	12a14
Ground leaf,	6 a 7	Virginia,	4 a 9
Fine red	6½a 8	Rappahannock,	
wrappery, suitable for segars,	8a13	Kentucky,	3 a
		St. Domingo,	13 a11
Yellow and red,	7a10	Cuba,	15 a38
PLASTER PARIS—			
Cargo, pr ton cash	3.50a	Ground per bbl.	1.12a
SUGARS—			
Hav. wh. 100lbs	9a10.50	St. Croix, 100lbs	7.00a8.00
Do. brown	a7.50	Brazil, white,	a
Porto Rico,	5.50a6.40	Do. brown,	
New Orleans,	5a 5.25	Lump, lb. c.	
FLOUR—We quote			
Superfine How. st., from stores, bl			$4.25a4.31
Do. City Mills,			4.31a4.37
Do. Susquehanna,			
Rye, first			3.18a
Corn Meal, kiln dried, per bbl.			2.25
Do. per hhd.			11.75
GRAIN—			
Wheat, white, p bu	90a100	Peas, black eye,	50a55
" best Va red	85a90	Clover seed, store	$4.25
" ord. to pri. Md	75a90	Timothy do	2.a2.25
Corn, white,	38a38½	Flaxseed, rough st.	1.35
" yellow Md.	40a42	Chop'd Rye, 100 lbs.	1.25
Rye, Md.	67a	Ship Stuff, bus.	20a
Oats, Md.	25a26	Brown Stuff,	15a
Beans,	110	Shorts, bushel,	10a
FEATHERS—per lb.			31a
COFFEE—			
Havana,	7 a 8	Java, lb.	10 a12
P. Rico & Laguay.	5½a6½	Rio,	6½a7¼
St. Domingo,	5½a 6	Triage,	3½a 4½
CANDLES—			
Mould, common,	a10	Sperm,	30a31
Do. choice brands,	10½	Wax,	60a65
Dipped,	a 9		

Tobacco.—The market this week has continued v'ry inanimate the stocks being very light, and the receipts trifling. Shippers are anxious to purchase, and as soon as inducements are offered the market will no doubt open with activity. The limited lots of Maryland sold are at former prices, viz:—Inferior and common $2 a $3; middling to good $3. 50 a $5; good $6 a $7. 50; and fine $8 a $14—Small sales of Ground Leaf at $3 a $7, for inferior to good parcels. There is nothing doing in Ohio and former prices are continued, viz Common to middling $3 a $4. 50; good $5 a $6; fine red and wrappery $6.50 a $10; fine yellow $7.50 a $10, and extra wrappery $11 a $13. We note a sale of 40 hhds. Mason County, Ky. Tobacco at $3.50 a $11. 50, as in quality. The inspections comprise 39 hhds. Maryland; 127 hhds. Ohio; 190 hhds. Kentucky; and 5 hhds Virginia—total 291 hhds.

Hogs. Live Hogs are selling at $4,75a $5 per 100lbs. as in quality, principally at $4 87½.

Cattle.—There were about 550 head of Beef cattle offered at the Scales this morning, of which 50 were driven North, and the largest portion of the balance sold to packers and butchers. The prices paid ranged from $2 to $3 per 100 lbs. on the hoof according to quality, equal to $4a$5,75 net.

PRICE 100 DOLLARS.

Reaping machines simplified, and their durability very greatly increased; will cut as fast as any 1 made prior to 1841; two horses are geared abreast, and are relieved from the once objectionable weight, and the draught is very much diminished. The value of this late improvement has been tested by Wm. Butler and Jacob Staley, of Shepherdstown, Va. who if applied to will give it the highest character.

The large Reapers are made as usual at $170—medium size will be made to order.

My Corn and Cob Crusher, so well known in the South, stands unrivalled—price $25 to $ 5. OBED HUSSEY.

Baltimore, Jan. 7, 1845. ja 9

TO GARDENERS, FARMERS & PLANTERS.

PERUVIAN GUANO.

The subscriber is prepared to furnish to order, Guano of the cargo imported by Saml. K. George, esq. Agent of the Peruvian Guano Company, and warranted genuine, at $2.50 per 100 lbs. for one or more bags.

This cargo is warranted to be pure and of the best quality, and is in the original bags (of about 130 lbs. each.) All orders to insure attention, must be accompanied with the cash.

SAMUEL SANDS,
Feb 26 office of the American Farmer.

☞National Intelligencer publish 3 times.

LANDRETH'S SUPERIOR GARDEN SEEDS.

The subscriber is prepared to furnish Landreth's Garden Seeds, (fresh and genuine) to wholesale purchasers, at quite reduced prices Catalogues in pamphlet form, containing useful knowledge in the cultivation of vegetables, distributed gratis. Every person having a garden should have one of them.

ALSO IN STORE,

A general assortment of Agricultural Implements, embracing almost every useful implement required by farmers and planters, which will also be sold at very reduced prices. His stock of Plows and Plow Castings he believes to be equal to any in the country, either as to variety, quality of materials or workmanship.

A few second hand Plows taken in exchange, will be sold very cheap.—Ohio Grindstones, small size, a superior article.

JONATHAN S. EASTMAN,
fe 26 Pratt street, between Charles and Hanover sts.

RARE CHANCE FOR A DAIRY-MAN.

A gentleman in Carlisle, Pa. wishes to engage with a competent person to take charge of a Dairy and Truck Farm on shares—The farm is of 60 to 70 acres, partly within the borough, in excellent order; there is no opposition to the dairy, and the only one to the truck business is from a borough 20 miles off. The stock of every description will be furnished—there is a fine stock of Cows and Horses, and all the apparatus for carrying on the business, and excellent dwelling, barn, stabling, and root cellar. Nothing would be required of the person engaging except the labor, and he ought to have about $200 in cash. Apply to the editor of the American Farmer, if by letter, post paid. None but those who can produce unquestionable reference as to charactor and qualifications need apply. fe 26

BARNABY & MOOER'S, AND PROUTY & MEARS' PLOWS.

I have a number of the celebrated Barnaby & Mooers' Plows for sale, at a considerable reduction from former rates. This plow is highly approved of by many who have used it, and who know how to handle it.

Also, the premium Plow of Prouty & Mears, so universally admired. fe 26 S. SANDS, Farmer office.

NEW AND IMPROVED POUDRETTE,

Made by the Lodi Manufacturing Company of New York, may be obtained by application to BRICE & SMITH, Agents,
fe 20 3m No. 6 Bowly's wharf, Baltimore.

A SITUATION AS MANAGER OF A FARM,

Is wanted by an active Man who has had considerable experience in his business in every branch, including the breeding and raising of stock generally—He can give satisfactory references, and will devote his utmost abilities and energies to the service of his employer. Enquire of the Editor of the American Farmer.
fe 20 4t*

POUDRETTE

Of the very best quality for sale. Three barrels for $5, or ten barrels for $15—delivered free of cartage by the New York Poudrette Company, 23 Chambers street, New York. Orders by mail, with the cash, will be promptly attended to, and with the same care as though the purchaser was present, if addressed as above to

D. K. MINOR, Agent.

A supply now on hand from the N. York establishment, by the single barrel, or larger quantity. For sale by

SAML. SANDS,
je 19 office of the Farmer, Baltimore

PORTABLE TUBULAR STEAM GENERATOR.

The undersigned *successors to the late firm of Bentley, Randall & Co.* are manufacturing, and have constantly on hand a full assortment of the above Boilers, which within the last few months have undergone many improvements: we can now with confidence recommend them for simplicity, strength, durability, economy in fuel, time, labor and room, to surpass any other Steam Generator now in use. They are equally well adapted to the Agriculturist for cooking food for cattle and hogs, the Dyer, Hatter and Tanner for heating liquors, to Manufacturers (both Cotton and Woollen) for heating their mills, boiling sizing, heating cylinders, &c., to Pork Butchers for heating water for scalding hogs and for *rendering lard*, to Tallow Chandlers for melting tallow by circulation of hot water (in a jacket,) to Public Houses and Institutions for cooking, washing and *soap making*, and for many other purposes for all of which they are now in *successful* operation; the economy in fuel is almost incredible; we guarantee under all circumstances a saving of *two thirds*, and in many instances *fully three fourths*—numerous certificates from the very best of authority can be produced to substantiate the fact. We had the pleasure of receiving the premium for the best Steam Apparatus at the Agricultural Fair held at Govanstown in October 1843.

Manufactory, McCausland's old Brewery, Holliday st. near Pleasant st., Baltimore, Md.

Dec. 6. tf RANDALL & CO.

WHITE TURKIES.

A few pairs for sale at $3 per pair. Also for sale in the spring, several kinds of Fancy Fowls, &c.

A pure bred CHINA SOW, about 1 year old, in fine order, at $15.

SAMUEL SANDS,
ja 15 at the office of the American Farme.

R. SINCLAIR, jr. & Co's. CATALOGUE

FOR 1845.—(*Continued.*)

☞Orders for any article in the annexed catalogue will meet with prompt attention, addressed to S. SANDS, publisher of the American Farmer, or to R. Sinclair, jr. & Co. Light st. wharf.

WINAN'S SELF-SHARPENING PLOW.

No. 00 The smallest size, a 7 inch seed and cultivating plough, . . . $5 00

No. 0 A one horse cultivating plow, 8 inches wide, nearly the same length as the smaller one, but has a bolder mould-board, and better adapted to sandy lands. The shares and heels of these two sizes suit each other, . . . 5 00

No. 1 A light two horse Plow . . 6 50

No. 2 A two horse plow, 9 inches wide, . 7 00

No. 3 A two horse flushing plow, . . 8 00

No. 4 A heavy 3 horse plow with sword coulter, 12 50

These plows possess the advantage of having a moveable steel point, from 15 to 24 inches long, which can be reversed, as a bevel is formed by wearing, and advanced as it becomes shorter, so as to bring into actual wear from 12 to 18 inches of a solid steel bar; by thus changing the point, the share continues to perform its work well until worn off nearly up to the mould board; whereas, without this moveable point, shares are generally rendered useless when only half-worn.

This valuable principle may be applied to any shape of mould board.

EVANS' OR CHENOWETH'S SELF-SHARPENING PLOW.

6 inch. A light one horse seeding plow, $4 50
7 " A one horse corn plow, . . 4 75
8 " A light two horse plow, . . . 5 25
9 " A two horse plow, . . . 6 50

The construction of this plow is particularly adapted to light soils, the share is formed to be capable of being turned end for end, or upside down at pleasure—thus producing the most perfect self-sharpening principle that has yet been introduced.

BEACHE'S SELF-SHARPENING PLOW.

6 inch. A seed or cultivating plow, . $4 50
7 " A do do . . 4 70
8 " A light two horse plow, . 5 25
9 " A two horse plow, . . . 6 50

The Beach mould board is an abrupt concave, and well suited for light or sandy soil—the shear and point are secured under the mould board—the plan is very good, and the plow in pretty general use in Delaware, Eastern Shore of Maryland, &c.

PIERCES' SELF-SHARPENING PLOW,

Made with wrought shear and point, and a bold convex mould board, well suited for every variety of soil. Rated for 2 or 3 horses. Price, . . $14 00

WOOD'S PLOW.

No. 21 A seed and cultivating plow, 8 inches wide, with cast shear, . . 4 50

Corn. A one horse plow, with wrought iron standard and cast shear, . . 5 00

No. 1 A. A light two horse plow, 9 inches wide, 6 00

No. 1½ A two horse plow, with sword coulter and cast shear, a superior flushing plow, 7 00

The form of the mould board of these plows is convex, and made so as to equalize the pressure as practical use has dictated.

WILEY PLOW.

No. 3 A seed or cultivating plow, 4 50
No. 4 A light two horse plow, 5 25
No. 56 A two horse plow, 8 00
No. 76 A heavy two horse plow, 9 00
No. 8½ A do do 10 00

The form of the Wiley Plow mould board is convex, and similar to the Woods or Freeborn patterns,—the shear has two points, and is secured to the mould board by a cap which also protects the breast of the mould board from wear. The points of these plows are very strong and well adapted for rough lands.

SINCLAIR & MOORE'S.

6 inch. A seed plow with cast shear, . 4 50
7 inch. A one horse plow, with cast shear, . 4 75
8 inch. A light two horse plow, with cast shear, 5 25
9 inch. A two horse plow, with cast shear, . 6 50
9 inch. A wrought shear plow, . . 9 00
10 inch. A heavy 2 horse plow with wro't shear, 10 00
10 inch. A heavy 2 horse plow with sword coulter, a superior flushing plow, made both right and left handed, . . 12 00

GRINDSTONES ON FRICTION ROLLERS.

This is a labor saving machine of great value. The stones are hung on friction rollers, and moved by the foot with a treadle. By this arrangement one man can operate—on the contrary, the old plan requires two, - - - - $15 00

Friction Rollers and axles will be sold separate, which can be fitted to any common grindstone and frame,

REVOLVING HORSE RAKES.

The Revolving Horse Rake is now used so generally in this section of the United States, that its utility is obvious—One man and a horse will rake in a neat and clean manner, from 20 to 25 acres per day, $12 00

Common Single Teeth do. - - - 6 00

Dirt Scrapers, a great labor saving implement, for levelling roads, filling up hollows, &c.	8 a 10 00
Rollers, double and single,	15 a 35 00
Iron Cotton Press Screws,	$130
Ox Yokes and Bows, yankee plan,	6 00
Cider Mill Nuts,	5 cts per lb
Wheel Barrows,	5 a 6 00
Trucks, for use of store houses,	6 a 8 00
Cast Iron Pumps,	8 a 12 00
Post Hole Augurs,	5 a 6 00
Patent Screw Wrenches,	2 a 3 00
Swingle Trees,	1 a 5 00
Grain and Grass Scythes, best American and English brand,	1 a 1 50
Bramble and Grass Scythes, with hangings complete	1 50 a 2 50
Scythe Snaths,	0 50 a 1 00
Scythe Stone and Ripes,	8 a 10
Cradler's Hammers,	37½
Sickles, Dutch and English,	62½
Wooden Rakes,	25 a 50
Hay and Straw Knives,	1 25 a 2 00
Grain Shovels,	0 87 a 1 00
Long handle Irish Shovels,	0 50 a 1 00
Round and square point Shovels,	0 50 a 1 25
Common and Ditching Spades,	62½
Briar Hooks, cast steel,	1 00
Axes and Hatchets, cast steel	0 50 a 1 50
Sheep Shears,	0 50 a 0 75
Manure Drags,	75
Manure Forks, spring steel	0 50 a 2 50
Hay Forks, do	0 25 a 0 75
Common Field Hoes,	0 25 a 0 62
Northern Steel Hoes	50 a 57
Grubbing Hoes	75
Picks	1 00
Mattocks	75 a 1 37
Grubbing Hoes	1 25
Curry Combs	12 a 25
Back Bands	75 a 1 00
Bridles	75 a 1 00
Collars	75 a 1 75
Trace Chains—per pair	62 a 1 25
Rope Traces	25
Harness	62
Ox Chains	10 cts per lb
Cattle Halters	75
Horse and Dog do	37 a 62
Bull Rings	1 00
Flails	75
Apple Pearers	1 00

BERKSHIRE BOAR.

A fine Berkshire Boar, 12 months old, of pure stock, for Sale—Price $10—He is a very fine animal.

Also some half-bred Berkshire Pigs—Apply at this office.

MARTINEAU'S IRON HORSE-POWER IMPROVED

Made less liable to get out of order, and cheap to repair, and at less cost than any other machine.

The above cut represents this horse-power, for which the subscriber is proprietor of the patent-right for Maryland, Delaware and the Eastern Shore of Virginia; and he would most respectfully urge upon those wishing to obtain a horse power, to examine this before purchasing elsewhere; for beauty, compactness and durability it has never been surpassed.

Threshing Machines, Wheat Fans, Cultivators, Harrows and the common hand Corn Sheller constantly on hand, and for sale at the lowest prices.

Agricultural Implements of any peculiar model made to order at the shortest notice.

Castings for all kinds of ploughs, constantly on hand by the pound or ton. A liberal discount will be made to country merchants who purchase to sell again.

Mr. Hussey manufactures his reaping machines at this establishment. R. B. CHENOWETH,

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